**In the Claims**

Applicants offer the following amendments to the claims:

1. (Currently Amended) A system for modeling communication networks, comprising:

a memory operable to store configuration data for ~~a plurality of network~~ different types of communication networks, the configuration data associating each ~~network~~ type of communication network with components, connections, and rules for connecting the components using the connections; and

a processing module coupled to the memory and operable to model the different types of networks using the configuration data, the processing module further operable to allow a user to select one of the ~~network~~ types of communication networks and to design a ~~communication~~ model network using the components and connections associated with the selected ~~network~~ type of communication network according to the configuration data.

2. (Currently Amended) The system of Claim 1, wherein the processing module is further operable to determine whether a mode operation corresponding to a ~~network~~ type of communication network is activated and to allow a user to design a ~~communication~~ model network of that ~~network~~ type of communication network if the corresponding mode of operation is activated.

3. (Currently Amended) The system of Claim 1, wherein the processing module is further operable to allow the user to select one of the components associated with the ~~network~~ selected type of communication network, to display a node to represent the selected component in the ~~communication~~ model network, and to associate equipment with the selected component.

4. (Currently Amended) The system of Claim 1, wherein the processing module is further operable to allow the user to select one of the connections associated with the ~~network~~ selected type of communication network, to connect two components using the selected connection according to the rules associated with the ~~network~~ selected type of communication network, and to display a connection line between two nodes to represent the connection between the two components.

5. (Currently Amended) The system of Claim 1, wherein the rules associated with ~~the network type~~ at least one of the types of communication networks indicate a maximum number of connections between one component and other components.

6. (Currently Amended) The system of Claim 1, wherein:

the configuration data associates ~~the network type~~ at least one of the types of communication networks with a hierarchy of connectors; and

the processing module is further operable to allow a user to assign subordinate connectors to a connection according to the configuration data associated with the ~~network~~ type of communication network.

7. (Currently Amended) The system of Claim 1, wherein the processing module is further operable to validate the user's ~~communication~~ model network to ensure compliance with the rules associated with the ~~network~~ type of communication network according to the configuration data.

8. (Currently Amended) The system of Claim 1, wherein the processing module is further operable to provision some of the ~~communication~~ model network by communicating instructions to some components.

9. (Currently Amended) The system of Claim 1, wherein the processing module comprises software instructions for modeling a generic communication network and interfaces with configuration data for specific types of communication networks.

10. (Original) The system of Claim 1, wherein the configuration data associates the components with component properties and associates the connections with connection properties.

11. (Presently Amended) A method of modeling communication networks, comprising:

storing configuration data for ~~a plurality of network~~ different types of communication networks, the configuration data associating each ~~network~~ type of communication network with components, connections, and rules for connecting the components using the connections;

receiving a user selection for one of the ~~network~~ different types of communication networks; and

allowing a user to design a model ~~designing a communication~~ network using the components and connections associated with the selected ~~network~~ type of communication network according to the configuration data.

12. (Currently Amended) The method of Claim 11, further comprising:

determining whether a mode operation corresponding to a ~~network~~ type of communication network is activated; and

allowing a user to design a model ~~designing a communication~~ network of that ~~network~~ type of communication network if the corresponding mode of operation is activated.

13. (Currently Amended) The method of Claim 11, further comprising:

receiving a user selection for one of the components associated with the selected ~~network~~ type of communication network;

displaying a node to represent the selected component in the ~~communication~~ model network; and

associating equipment with the selected component.

14. (Currently Amended) The method of Claim 11, further comprising:

receiving a user selection for one of the connections associated with the selected ~~network~~ type of communication network;

connecting two components using the selected connection according to the rules associated with the ~~network~~ type of communication network; and

displaying a connection line between two nodes to represent the connection between the two components.

15. (Currently Amended) The method of Claim 11, wherein the rules associated with ~~the network type~~ at least one of the different types of communication networks indicate a maximum number of connections between one component and other components.

16. (Currently Amended) The method of Claim 11, wherein:

the configuration data associates ~~the network type~~ at least one of the different types of communication network with a hierarchy of connectors; and

~~designing the communication~~ allowing the user to design the model network further comprises assigning subordinate connectors to a connection according to the configuration data associated with the ~~network~~ type of communication network.

17. (Currently Amended) The method of Claim 11, further comprising validating the ~~communication~~ model network to ensure compliance with the rules associated with the selected ~~network~~ type of communication network according to the configuration data.

18. (Currently Amended) The method of Claim 11, further comprising provisioning some of the ~~communication~~ model network by communicating instructions to some components.

19. (Currently Amended) The method of Claim 11, wherein ~~designing the communication~~ allowing the user to design a model network further comprises interfacing software instructions for modeling a generic communication network with configuration data for specific types of communication networks.

20. (Original) The method of Claim 11, wherein the configuration data associates the components with component properties and associates the connections with connection properties.

21. (Presently Amended) Network modeling software embodied in a computer-readable medium and operable to perform the following steps:

storing configuration data for ~~a plurality of network~~ different types of communication networks, the configuration data associating each ~~network~~ type of communication network with components, connections, and rules for connecting the components using the connections;

receiving a user selection for one of the ~~network~~ different types of communication networks; and

allowing a user to design ~~designing~~ a ~~communication~~ model network using the components and connections associated with the selected ~~network~~ type of communication network according to the configuration data.

22. (Currently Amended) The network modeling software of Claim 21, further operable to perform the steps of:

determining whether a mode operation corresponding to a ~~network~~ type of communication network is activated; and

allowing a user to design a model ~~designing a communication~~ network of that ~~network~~ type of communication network if the corresponding mode of operation is activated.

23. (Currently Amended) The network modeling software of Claim 21, further operable to perform the steps of:

receiving a user selection for one of the components associated with the selected ~~network~~ type of communication network;

displaying a node to represent the selected component in the ~~communication~~ model network; and

associating equipment with the selected component.

24. (Currently Amended) The network modeling software of Claim 21, further operable to perform the steps of:

receiving a user selection for one of the connections associated with the selected ~~network~~ type of communication network;

connecting two components using the selected connection according to the rules associated with the ~~network~~ type of communication network; and

displaying a connection line between two nodes to represent the connection between the two components.

25. (Currently Amended) The network modeling software of Claim 21, wherein the rules associated with ~~the network type~~ at least one of the different types of communication networks indicate a maximum number of connections between one component and other components.

26. (Currently Amended) The network modeling software of Claim 21, wherein:

the configuration data associates ~~the network type~~ at least one of the different types of communication network with a hierarchy of connectors; and

~~designing the communication~~ allowing the user to design the model network further comprises assigning subordinate connectors to a connection according to the configuration data associated with the ~~network~~ type of communication network.

27. (Currently Amended) The network modeling software of Claim 21, further operable to perform the step of validating the ~~communication~~ model network to ensure compliance with the rules associated with the selected ~~network~~ type of communication network according to the configuration data.

28. (Currently Amended) The network modeling software of Claim 21, further operable to perform the step of provisioning some of the ~~communication~~ model network by communicating instructions to some components.

29. (Currently Amended) The network modeling software of Claim 21, wherein ~~designing the communication~~ allowing the user to design a model network further comprises interfacing software instructions for modeling a generic communication network with configuration data for specific types of communication networks.

30. (Original) The network modeling software of Claim 21, wherein the configuration data associates the components with component properties and associates the connections with connection properties.

31. (Currently Amended) A system for modeling communication networks, comprising:

a memory operable to store first configuration data for a first ~~network~~ type of communication network and second configuration data for a second ~~network~~ type of communication network; and

a processing module coupled to the memory and operable to determine whether a first mode operation corresponding to the first ~~network~~ type of communication network is activated and ~~to model a communication~~ to allow a user to design a model network of the first ~~network~~ type of communication network using the first configuration data if the first mode of operation is activated, the processing module further operable to determine whether a second mode of operation corresponding to the second ~~network~~ type of communication network is activated and ~~to model a communication~~ to allow a user to design a model network of the second ~~network~~ type of communication network using the second configuration data if the second mode of operation is activated.

32. (Currently Amended) The system of Claim 31, wherein:

the first configuration data describes components and connections that may be included in the ~~communication~~ model network of the first ~~network~~ type of communication network and rules for connecting the components using the connections; and

the processing module allows a user to design the ~~communication~~ model network of the first ~~network~~ type of communication network using the components and connections according to the rules.

33. (Currently Amended) The system of Claim 31, wherein the processing module ~~models the communication~~ allows the user to design the model network of the first ~~network~~ type of communication network by creating nodes to represent components of the first ~~network~~ type of communication network and creating connection lines to represent connections between the components according to the first configuration data.

34. (Currently Amended) A method for modeling communication networks, comprising:

storing first configuration data for a first ~~network~~ type of communication network;

storing second configuration data for a second ~~network~~ type of communication network;

determining whether a first mode operation corresponding to the first ~~network~~ type of communication network is activated;

~~modeling a communication~~ allowing a user to design a model network of the first ~~network~~ type of communication network using the first configuration data if the first mode of operation is activated;

determine whether a second mode of operation corresponding to the second ~~network~~ type of communication network is activated; and

~~modeling a communication~~ allowing a user to design a model network of the second ~~network~~ type of communication network using the second configuration data if the second mode of operation is activated.

35. (Currently Amended) The method of Claim 34, wherein:

the first configuration data describes components and connections that may be included the ~~communication~~ model network of the first ~~network~~ type of communication network and rules for connecting the components using the connections; and

~~modeling the communication~~ allowing the user to design the model network of the first type further comprises using the components and connections according to the rules.

36. (Currently Amended) The method of Claim 34, wherein ~~modeling the communication~~ allowing the user to design the model network of the first ~~network~~ type of communication network further comprises displaying nodes to represent components of the first ~~network~~ type of communication network and connection lines to represent connections between the components according to the first configuration data.